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A NEW SPECIES OF *POTENTILLA* (ROSACEAE) FROM CERRO QUIEXOBRA, OAXACA

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ABSTRACT

A new species of *Potentilla*, ***P. macdonaldii*** B.L. Turner, is described from the subalpine areas of Cerro Quiexobra, Oaxaca. It is perhaps most closely related to *P. richardii* Lehm. of the sect. *Multijugae* but differs in having thinner more dentate leaves, flowers 2-5 arranged in open cymes, and smooth achenes.

KEY WORDS: Rosaceae, *Potentilla*, México

Routine identification of Mexican plants has revealed the following novelty.

POTENTILLA MACDONALDII B.L. Turner, *spec. nov.* TYPE: MEXICO. Oaxaca: Mpio. Miahuatlán, 35 km ESE of Miahuatlán, 5 km NE of Santo Domingo Ozolotepec, Cerro Quiexobra, "subalpine glades surrounded by pine forests on ridgetops and in mountain saddles", 3500-3700 m, 3 Oct 1990, *Andrew McDonald 2995* (HOLOTYPE: TEX!; Isotype: MEXU).

Potentillae richardii Lehm. similis sed differt foliolis tenuioribus dentibus numerosioribus (dentes marginales 5-9 per foliolum vs. dentes 3-5 per foliolum), floribus in cymis laxis dispositis in pedunculis 1-4 cm longis (vs. plerumque solitariis axillaribus in pedunculis 1 cm longis vel minus), et acheniis laevibus (vs. ornatis nervatura prominenti).

Prostrate or subprostrate perennial herbs 5-18 cm high, arising from woody taproots. Stems moderately villous-hirsute, the hairs mostly 0.8-1.5 mm long. Leaves mostly (3-)5-7 pinnately parted, the lower mostly 3-6 cm long, 1.5-2.5 cm wide; stipules united for ca. 1/2 their length to the lower petiole proper; petioles 1.5-2.0 cm long, pubescent with silky-villous spreading hairs 1-2 mm long; divisions of the leaf flabellate, irregularly dentate with 5-9 teeth, the latter 0.6-1.4 mm long. Inflorescences cymose, 2-5 flowers per primary stems; peduncles mostly 1-4 cm long, pubescent like the stems. Receptacle conical, pubescent. Bracts of the calyx 3.5-4.5 mm long, broadly ovate in outline, clearly 3-lobed. Sepals lanceolate, 5-6 mm long, ca. 2 mm wide, united below, sparsely villous without, glabrous within. Petals yellow, spreading, 6-7 mm long, 5-6 mm wide, the apices emarginate, the cleft ca. 1

mm deep. Stamens 18-21 in 2-3 series. Styles terete-conical, outcurved, ca. 0.5 mm long, glabrous. Seeds ovoid, brown, ca. 0.75 mm long, glabrous, smooth.

ADDITIONAL SPECIMEN EXAMINED: MEXICO. Oaxaca: about same location as the type, 3650-3800 m, 10 Dec 1989, *McDonald 2919* (TEX).

This taxon, because of its pinnately compound leaves, is obviously related to *Potentilla richardii* but can be readily recognized by characters indicated in the following couplet.

1. Flowers 2-5, arranged in open cymose panicles, the ultimate peduncles 1-4 cm long; petals spreading, mostly 6-7 mm long; bracts at base of sepals mostly 3-cleft, rarely not; achenes smooth..... *P. macdonaldii*
1. Flowers mostly solitary, axillary, the peduncles 1 cm long or less; petals erect, mostly 4-5(-6) mm long; bracts at base of sepals mostly elliptical, sometimes 2-cleft; achenes nervate..... *P. richardii*

While compared with *Potentilla richardii* of the sect. *Multijugae* (*sensu* Rydberg 1902) in the above diagnosis and key, *P. macdonaldii* also possesses characters suggestive of *P. heterosepala* Fritsch., namely flowers arranged in leafy cymes and bractlets 3-lobed. In Johnston's (1985) key to sections, *P. macdonaldii*, largely because of its pinnately compound leaves and small styles, will key to the sect. *Multifidae*. In truth, *P. macdonaldii* appears to combine characters of both *P. heterosepala* (a poorly studied complex of Guatemala and southernmost México) and *P. richardii* (a better known complex of the trans-volcanic belt of southcentral México), standing somewhat between these in both morphology and geography.

It is a pleasure to name this species for its only known collector, Dr. Andrew McDonald, currently at Harvard University and first botanist to ascend and collect on Cerro Quiexobra, from which numerous novelties have been named, many in his honor (*cf.* Nesom 1995).

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